

Notice of Allowability

Application No.

09/869,401

Examiner

Jean B. Jeanglaude

Applicant(s)

SPERSCHNEIDER ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 09-05-01.
2. ☒ The allowed claim(s) is/are 1-30.
3. ☒ The drawings filed on 27 June 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 6/01; 6/02; 12/03
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 6/23/05
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Jean Bruner Jeanglaude
Jean Bruner Jeanglaude
Primary Examiner

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

A message was left with Mr. Michael A. Glenn's assistance (Sheryl Peterson) as how the amendment will be made.

The application has been amended as follows: on page 1 insert the Sub-title – continuing Data –

Insert below the subtitle -- This application is the national phase under 35 U.S.C. 371 of PCT International No. PCT/EP98/08475 which has an International filing date of December 28, 1998 -.

Reasons For Allowance

Claims 1 – 30 are allowable.

1. The following is an examiner's statement of reasons for allowance: in combination with other limitations of the claims the prior arts made of record fail to suggest a device and method for coding an audio signal to obtain a coded bit stream wherein the bit stream includes code words created by transformed a block of discrete-time samples of the audio signal into the frequency domain to obtain a block of spectral values which represent the audio signal and coding the spectral values with a code table having a limited number of code words of different lengths to obtain spectral values coded with code words, the length of a code word which is assigned to a spectral

value generally being that much shorter the higher the probability of occurrence of the spectral value is comprising a unit for defining priority code words among the code words, those code words which represent spectral values which are psychoacoustically important compared to other spectral values being defined as priority code words and a unit for positioning the priority code words in a raster so that the start of a priority code word which represents a spectral value of the block of spectral values coincides with one raster point and the start of another priority code word which represents another spectral value of the block of spectral values coincides with another raster point. Moreover, in combination with other limitations of the claims the prior arts made of record fail to suggest a device and method for decoding a bit stream representing a coded audio signal, wherein the coded bit stream contains code words of different lengths from a code table and has a raster with equidistant raster points where the code words include priority code words which represent particular spectral values of a block of spectral values which are psychoacoustically important compared to the spectral values where the block of spectral values represent a spectrum of a block of temporal samples of the audio signal and where the priority code words are aligned with raster points so that the start of a priority code word representing the spectral value of the block of spectral values coincides with one raster point and the start of another priority code word representing another spectral value of the block spectral values coincides with another raster point comprising a unit for reading out or in the case of a non-linear arrangement with frequency, resorting the priority code words, which are aligned with the raster points, in the coded bit stream in such a way as to obtain a linear

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arrangement of the same frequency, the start of a priority code word coinciding with a raster point so that by decoding the priority code words with an associated code table to obtain decoded spectral values and transforming the decoded spectral values back into the time domain a decoded audio signal is obtainable. Furthermore, in combination with other limitation of the claims, the prior arts made of record fail to suggest a device and method for decoding a bit stream, the bit stream having code words of different lengths from a code table and as side information, information on the length of the longest actually occurring code word comprising a decoder for decoding the bit stream using the code table, the decoder being operative to detect whether a code word extracted from the bit stream is longer than the length of the longest actually occurring code word and is therefore, an erroneous code word, the decoder being further operative to adopt a countermeasure, when an erroneous code word is detected.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
3. Alsup et al. (US patent Number 4,270,025) discloses sampled speech compression.

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4. Fedele (US Patent Number 4,813,056) discloses a modified statistical coding of digital signals.
5. Picone et al. discloses a very long rate speech encoder and decoder.
6. Waldman et al. (US Patent Number 4,942,467) discloses a predictor controlled encoder for digital transmission systems.
7. Theile et al. (US Patent Number 4,972,484) discloses a method of transmission or storing masked sub-band coded audio signals.
8. Fielder (US Patent Number 5,222,189) discloses a low time-delay transform coder, decoder, and encoder/decoder for high quality audio.
9. Hall, II et al. (US patent Number 5,341,457) discloses a perceptual coding of audio signals.
10. Uramoto et al. (US patent Number 5,699,117) discloses a moving picture circuit.
11. Ishikawa (US patent Number 6,252,992) discloses a variable length coding.
12. Grill et al. (US Patent Number 6,502,069) discloses a method and a device for coding audio signals and a method and a device for decoding a bit stream.
13. Karczewicz (US Patent number 6,879,268) discloses an adaptive variable length coding of digital video.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B. Jeanglaude whose telephone number is 571-272-1804. The examiner can normally be reached on Monday - Friday 7:30 A. M. - 5:00 P.M..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Tokar can be reached on 571-272-1812. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in cursive script, reading "Jean Bruner Jeanglaude".

Jean Bruner Jeanglaude
Primary Examiner
June 16, 2005